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### **REMARKS/ARGUMENTS**

#### **Status of Claims**

Claims 1 to 55 remain in the application.

#### **Claim Amendments**

The preambles of claims 33 and 35 have been amended for consistency with the claims from which they depend. Specifically, the term "interface apparatus" has been replaced with "wireless network" in the preambles of claims 33 and 35.

#### **35 U.S.C § 102 Claim Rejections**

In paragraph 3 of the Office Action, the Examiner has rejected claims 1-3, 5, 11-15, 22-24, 26-28, 36-38, 40-42, 44, 45, 47, 48 and 50 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,477,370 to Sigler et al. (hereinafter referred to as "Sigler"). It is noted that in paragraph 5 the Examiner does not actually indicate that claim 2 has been rejected. However, given the Examiner's rejection of claim 3, which depends from claim 2, and the discussion of claim 2 on page 4 of the Office Action, Applicant assumes that the Examiner intended to indicate that claim 2 was also rejected in paragraph 3 of the Office Action.

Before setting forth a discussion of the prior art applied in the detailed action, it is respectfully submitted that controlling case law has frequently addressed rejections under 35 U.S.C. § 102. "For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference." *Diversitech Corp. v. Century Step, Inc.*, 850 F. 2d 675, 677, 7 U.S.P.Q. 2d 1315, 1317 (Federal Circuit 1988). "If any claim, element, or step is absent from the reference that is being relied upon, there is no anticipation." *Closter Speedsteel AB v. Crucible, Inc.*, 793 F. 2d 1565, 230 U.S.P.Q. 81 (Federal Circuit 1986). The following analysis of the present rejections under 35 U.S.C. § 102(e) is respectfully offered with guidance from the foregoing controlling case law decisions.

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To begin, Applicant points out that the present invention is directed to apparatus, networks and methods that establish private networks between mobile stations within a wireless environment, allowing for wireless data transfers between the mobile stations that are part of the private networks, while the primary reference that has been cited by the Examiner, Sigler, is directed to apparatus, networks and methods that are strictly limited to establishing group voice calls between mobile phone users. This distinction is clear from the Abstract of Sigler, which states:

" In a mobile communication system, a system for providing communication between multiple users in a closed user group arrangement includes, for example, first and second mobile earth terminals (METS) registering with the mobile system. The first MET selects a closed user group network identifier (NET ID) representing a NET group to establish **voice communication** therewith and transmits the NET ID to a controller. The controller receives the NET ID from the first MET, validates the first MET for communication, validates the NET ID, **allocates a frequency for the NET group, and broadcasts** the message to the NET group informing the NET group of the allocated frequency. The second MET **tunes to the frequency in response to the message broadcast by the central controller.** The closed user group arrangement provides security measures to ensure only authorized METs gain access to the NET group, dual standby mode of operation, and/or priority default operation." (emphasis added)

See also column 9, lines 6-13, which describes:

"an integrated mobile telephone that can be used to transmit to, and receive from, to communicate in a Closed User Group (CUG) arrangement that allows each member of the group to **hear what any other user is saying.** Each member of the group can also **talk** when needed. The system behaves like a **radio multi-party line** where several parties communicate **over the same communication channel.**" (emphasis added)

It is important to note from the foregoing quotations that Sigler teaches group voice

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calling (i.e. point-to-multipoint multi-party line voice calls) in which a first mobile earth terminal (MET), such as a mobile telephone, first registers with a central controller over a **first channel/frequency** to establish a Network Group (NET) that is identified by a unique Network Group Identifier (NET ID). The central controller then **allocates a frequency, i.e., a channel, for group voice communications** for the NET, and broadcasts over a **group control channel (GC-S)** a message to the members of the NET that identifies the allocated frequency/channel, so that the group members can **switch/tune to the allocated frequency/channel** to begin group voice communications. In addition to the foregoing quotes, see also column 11, line 59 to column 12, line 9 of Sigler. Clearly, Sigler teaches that group voice communications are carried out over a common allocated frequency/channel, i.e., all of the NET group members share a **common frequency/channel** for group voice calls.

In contrast, independent claim 1 recites:

1. An apparatus for controlling data unit communications between a plurality of mobile stations, each of the mobile stations having a **respective maintained communication link with the apparatus that, once established, is maintained throughout a session**, the apparatus comprising:

means for grouping at least two of the plurality of mobile stations as members of a private network group;

means for determining if a first mobile station sending a **data unit** and a second mobile station scheduled to receive **the data unit** are both members of the private network group; and

means for enabling communication of the data unit from the first mobile station to the second mobile station **through the respective maintained communication links of the first mobile station and the second mobile station only if they are both members of the private network group.** (emphasis added)

An example of this apparatus is the Radio Network Controller (RNC) 24 illustrated in Figures 1 and 2.

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At the bottom of page 3 of the Final Office Action, the Examiner equates "each of the mobile stations having a respective maintained communication link with the apparatus" recited in claim 1 with the common group voice channel/frequency of Sigler. In particular, the Examiner has pointed to the integrated push-to-talk mobile radio system typically used by public services and law enforcement agencies, that behaves like a radio multi-party line whereby each party of the closed user group (CUG) can transmit and receive from other members of the group, as described at column 9, lines 6-63 of Sigler.

As noted above, Sigler discloses a system in which there are at least two different types of communication links used for communication between mobile stations and a central controller. As discussed below, these two different types of communication links are very different from the communication links recited in claim 1.

The first communication channel disclosed in Sigler is a broadcast (i.e. point-to-multipoint) group control channel for transmitting a notification message to notify group members of a group call and identify the group call frequency/channel, as described in column 12, lines 3-6. The present application describes "a very low bandwidth connection can be permanently maintained between a mobile station and its corresponding BTS" on page 12, lines 19-20, whereas Sigler describes at column 12, lines 20-24, "allocating a frequency for the NET group, and broadcasting the message to the NET group ... informing the NET group of the allocated frequency and the voice communication associated therewith". Accordingly, it should be clear that the group control channel (GC-S) taught by Sigler is a broadcast channel common to all mobile stations, not "a respective maintained communication link" between each mobile station and the apparatus for controlling data communication as recited in claim 1.

The second communication channel disclosed in Sigler is a group call channel, which is used for communication traffic by the respective mobile stations only after the notification message has been received over the group control channel and the mobile station has identified that there is a call to be received on the group call channel. As described at column 12, lines 24-26, "[t]he method also includes the steps of the second MET tuning to the frequency in response to the message broadcast by the central controller, and assigning by the central controller the first MET as current speaker for the NET group". As Sigler discloses utilizing a group voice call

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channel that group members can tune to only after they have received the notification message which specifies the frequency/channel, this group voice call channel is not the same as "a respective maintained communication link" as recited in claim 1.

Beginning at line 12 of page 3 of the Final Office Action, the Examiner equates the "means for enabling communication", as recited in claim 1, with the mobile earth terminal (MET) receiving a group call including a notification message having a group identification number (NET ID) and an allocated frequency identifier on a group control channel, and tuning to the allocated frequency to receive and/or transmit group voice calls, as disclosed by Sigler. The Examiner has particularly pointed to column 31, line 66 to column 32, line 11 of Sigler, which is quoted below:

" Upon accepting the NRCHA\_SU the MET starts timers  $T_{M20}$ , the Lost FES-C channel timeout (Nominally, for example, 10 secs), and  $T_{M22}$ , the Transmit Inhibit timeout (1 superframe). **The MET monitors the FES-C channel and generally only enables transmission if all the following conditions are true:**

the MET is in receipt of the FES-C channel, indicated when timers  $T_{M20}$ , and  $T_{M22}$  are not expired;

**the MET is a member of the NET ID;**

the Speaker ID is the vacant ID or is equal to the MET user's DN;

the user initiates PTT signaling." (emphasis added)

The above quotation from Sigler may describe conditions under which the mobile earth terminal (MET) itself enables transmission of a group voice message over the common group voice channel/frequency, i.e., "**The MET monitors the FES-C channel and generally only enables transmission if ...the MET is a member of the NET ID**". However, Sigler does not disclose "means for enabling communication of the data unit from the first mobile station to the second mobile station **through the respective maintained communication links** of the first mobile station and the second mobile station" (emphasis added), as recited in claim 1, as Sigler

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does not disclose enabling communication on the same "maintained communication link". Sigler discloses that the traffic channel is a group call channel. The group call is a common channel used by all group members, which is not the same as each of the mobile stations having a respective maintained communication link. Furthermore, communication in Sigler comprises both the notification message transmitted on the group control channel and the traffic transmitted on the group call channel.

For at least the above reasons, Sigler does not disclose an apparatus having all the features recited in claim 1, and as such cannot be held to anticipate claim 1 in view of the rulings in *Diversitech Corp. v. Century Step, Inc.* and *Closter Speedsteel AB v. Crucible, Inc.*.

By virtue of their claim dependencies on claim 1, Applicant submits that the rejection of claims 2, 3 and 5 is similarly in error. However, Applicant further submits that dependent claim 3 recites additional features that are novel and inventive over Sigler. Dependent claim 3 recites:

3. The apparatus according to claim 2, wherein each of the mobile stations further has a corresponding data address and **the data unit includes a data address corresponding to a desired destination mobile station as a destination address;**

wherein the means for grouping at least two of the plurality of mobile stations as members of a private network group further comprises means for listing the data addresses of the at least two mobile stations within the private network group table corresponding to their HLRs; and

wherein the means for determining if the first and second mobile stations are both members of the private network group further comprises means for determining the HLR of the second mobile station by looking-up the destination address of the data unit within the private network group table.

As noted above, Sigler teaches communication over both a group control channel and a group voice call channel. While Sigler may teach that an initial call set up request from a first mobile earth terminal (MET) to a group controller includes an identification of other METs that

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are part of the requested network group (NET) (See the Abstract of Sigler), there is absolutely no suggestion in Sigler that group voice call communications over the group voice call channel include a data address corresponding to a desired destination mobile station as a destination address.

In contrast, with reference to Figure 42 and the accompanying description on column 32, line 61 to column 33, line 37, Sigler merely teaches that the push-to-talk group voice traffic channel includes voice frames (VOICE FRAME) and set up frames (PTT\_SU SIGNALLING FRAME) that identify the group to which the voice frame is addressed, and the identity of which mobile earth terminal (MET) is the "speaker", i.e., the originator of the voice frame. As such, all voice frames are merely addressed to the group not to a desired destination mobile station. Accordingly, there is no suggestion in Sigler of a data unit that "includes a data address corresponding to a desired destination mobile station as a destination address", as recited in dependent claim 3.

In view of the foregoing, Applicant respectfully submits that the rejection of claim 1, as well as the rejection of claims 2, 3 and 5, which depend therefrom, is clearly in error.

In respect of independent claims 11, 12, 22, 28, 36, 40, 44 and 45, these claims recite features similar to those recited in claim 1. For at least the same reasons described above with regard to claim 1, Sigler does not disclose all of the features of these claims. Accordingly, the Examiner's rejection of claims 11, 12, 22, 28, 36, 40, 44 and 45, and claims 13-15, 23, 24, 26, 27, 37, 38, 41, 42, 47, 48 and 50, which depend therefrom, is similarly clearly in error.

In addition to the foregoing, Applicant further submits that independent claim 44 recites additional features that are both novel and inventive over Sigler. Specifically, independent claim 44 recites:

44. An apparatus for controlling **data packet communications** between a plurality of mobile stations, the apparatus comprising:

means for establishing a private network by establishing a respective maintained communication link between the apparatus and each of the mobile

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stations that, once established, is maintained throughout a session;

means for receiving **data packets** from members of the private network group, **each packet having a source and a destination**; and

means for enabling communication that **for each packet received**:

**determines if the source and destination both belong to the private network**; and

**forwards the packet to the destination only if the source and destination both belong to the private network.**

In contrast, Sigler merely teaches a group voice calling system, in which push-to-talk voice messages are transmitted and received by network group (NET) members over a common group voice call channel/frequency. Group members are notified of the common group voice call channel/frequency over a group control channel. After tuning to the group voice call channel/frequency the group members are free to carry out conventional push-to-talk communications over the group voice call channel/frequency. Sigler fails to teach or even suggest an apparatus for controlling data packet communications comprising *inter alia* "means for enabling communication that **for each packet received: determines if the source and destination both belong to the private network; and forwards the packet to the destination only if the source and destination both belong to the private network**", as recited in independent claim 44.

In view of the foregoing, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(e) is respectfully requested.

### **35 U.S.C § 103 Claim Rejections**

In paragraph 5 of the Office Action, the Examiner rejected claims 9 and 54 under 35 U.S.C. § 103(a) as being obvious to a person skilled in the art having regard to Sigler in view of U.S. Patent No. 6,032,051 to Hall et al. (hereinafter referred to as "Hall").

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In paragraph 6 of the Office Action, the Examiner rejected claims 30 under 35 U.S.C. § 103(a) as being obvious to a person skilled in the art having regard to Sigler in view of U.S. Patent No. 6,549,768 to Fraccaroli (hereinafter referred to as "Fraccaroli").

In paragraph 7 of the Office Action, the Examiner rejected claim 31 under 35 U.S.C. § 103(a) as being obvious to a person skilled in the art having regard to Sigler in view of U.S. Patent No. 6,249,584 to Hamalainen et al (hereinafter referred to as "Hamalainen").

Applicant respectfully traverses the foregoing rejections under 35 U.S.C. § 103(a) for reasons stated below.

The law on obviousness under 35 U.S.C. 103 was recently addressed by the United States Supreme Court in its decision in *KSR Int'l v. Teleflex, Inc.*, No. 04-1350, slip op. at 14 (U.S., Apr. 30, 2007). Following this, examination guidelines were released on October 10, 2007 in regards to determining obviousness under 35 U.S.C. § 103. According to these guidelines, the framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is stated in *Graham v. John Deere Co.* 383 U.S. 1, 148 USPQ 459 (1966). Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

The Graham factors, including secondary considerations when present, are the controlling inquiries in any obviousness analysis. Once the findings of fact are articulated, Office personnel must provide an explanation to support an obviousness rejection under 35 U.S.C. § 103. According to the United States Supreme Court decision in *KSR*, for the Patent Office to properly combine references in support of an obviousness rejection, the Patent Office must identify a reason why a person of ordinary skill in the art would have sought to combine the respective teachings of the applied references.

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Applicant's analysis below demonstrates that the Examiner has failed to properly conform to the aforementioned guidelines for a finding of obviousness under 35 U.S.C. 103. Moreover, even if, hypothetically, one were to combine the references cited by the Examiner, one would not arrive at the inventions recited in the present claims.

Applicant submits that claims 1 to 55 of the present application are patentable over Sigler, Hall, Fraccaroli, and Hamalainen, as the findings of fact as articulated by the Examiner are inaccurate. In particular, the Examiner has neither properly determined (i) the scope of the prior art, nor (ii) the differences between the claimed invention and the prior art. Furthermore, the Examiner has not provided a valid explanation to support an obviousness rejection under 35 U.S.C. § 103. Moreover, even if, hypothetically, one were to combine Sigler, Hall, Fraccaroli, and Hamalainen, one would not arrive at an invention that includes all of the limitations of any of the present claims. Applicant's reasoning is detailed below.

#### Determining The Scope Of The Prior Art

##### Sigler

As demonstrated above, the Examiner has erroneously asserted that Sigler discloses all of the features of the independent claims. In view of the foregoing, Applicant submits that the Examiner has ignored the fact that Sigler merely teaches a system, method and apparatus for group voice communications over a common group voice channel/frequency that requires the set up/establishment of group voice calls over a group control channel that broadcasts control messages that identify the common group voice channel/frequency to the members of the group.

##### Hall

The Examiner has asserted that Hall discloses "means for sending a bandwidth request signal prior to enabling communication of the data unit if the second mobile station has insufficient bandwidth capabilities to receive the data unit on the respective maintained communication link of the second mobile station". However, it is respectfully submitted that Hall fails to disclose this particular feature, as established below.

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Hall teaches wireless mobile communication devices and a home location register (HLR) that automatically transmit therebetween information regarding the status of the devices. The information can either be transmitted directly between the devices using the standard communication channels of a wireless network, or through the HLR. A plurality of mobile devices can be listed as a group and the status checks/updates can be limited to devices that are part of the group. When the status information is shared directly between the devices, the status information and the group membership information is stored on the devices. When the status information is shared via the HLR, the status information and the group membership information is stored on the HLR as a master source and the devices check/update status information from/to the HLR.

Column 6, lines 48-53 of Hall states that "[t]he group select input of FIG. 3 is a user input that selects which group is to be monitored. Moreover, the group select input can designate the selected group as a closed user group so that the device 31, while the closed user group designation is active, communicates to and receives communication from only the group members in the selected group". It is noted that this particular feature of Hall is limited to only the embodiment that involves direct communication between devices. The group select input is individual to the user, i.e., it is not a universal choice, and the individual device user can define his own group on his device, which does not have maintained communication links with other devices. This is quite different from the present invention, in which the apparatus has maintained communication links with each of the mobile stations and determines if data is to be communicated between the mobile stations based on whether or not they are part of the same private network.

The embodiments in which status information is shared directly between devices is not applicable to the present invention, as the apparatus that limits status updates/checks to group members is present on each of the devices, i.e., each device determines if the mobile station that is attempting to check/update its status is authorized to do so. Therefore, there are no maintained communication links between the apparatus and the devices, as each device does not maintain communication links with each of the other devices.

The Examiner has pointed to column 1, lines 53 to 67 of Hall in support of the assertion

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that Hall teaches "means for sending a bandwidth request signal prior to enabling communication of the data unit if the second mobile station has insufficient bandwidth capabilities to receive the data unit on the respective maintained communication link of the second mobile station".

However, the Examiner admits that this portion of Hall merely recites "checking the status of group members to determine whether or not the group member is busy". In fact, column 1, lines 53 to 67 states:

" If a first group member wishes to check the status of a second group member, **for example, to determine whether or not the second group member is busy**, conventional arrangements require the first group member to manually enter the phone number of the second group member and contact him via a **conventional wireless communication session such as a telephone call**. That is, there is no way for the first group member to know the status of the second group member without manually entering the phone number of the second group member and establishing a wireless communication session with the second group member. Moreover, conventional arrangements require the first group member to contact each and every group member individually in the above-described manner in order to check the status of all members of the group."

From the bolded portions of the above quotation of Hall, it is clear that the "busy" status described by Hall refers to the status of the user of the second wireless device, not the operational status of the second wireless device.

#### Fraccaroli

Fraccaroli teaches a system and method for matching mobile stations in a wireless network so that the users of the matched mobile stations are put in touch with one another. A server executes a customizable variable matching algorithm and probes the matching profiles corresponding to respective mobile units in a cell or group of cells for a match every time a new mobile unit subscribes into the cell or group of cells.

The match is based on physical location and the similarity of information that the users

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have stored in the network. A call between two matched users may be initiated if the users are determined to be in the same location. The matching profile can be updated either via the mobile station or a secure page on the Internet.

While Fraccaroli may disclose a method for providing matches between mobile terminals in the same geographical area, such matching is completely different from matching mobile terminals in a private network and enabling communication between members of the private network.

The Examiner has pointed to Figure 1 and column 3, lines 56 to 63 of Fraccaroli in support of the assertion that "Fraccaroli from the same or similar field of endeavour teach that it is known to provide the mobile switching center in communication with the apparatus and the radio network controller, the mobile switching center comprising means for controlling the switching operations of the wireless network within a predefined cell cluster".

Figure 1 of Fraccaroli illustrates a cellular network in which a visitor location register and mobile switching center (VLR-msc 104) is provided in each service area 103-1 to 103-4 of the network. Each VLR-msc is connected to one or more base station controllers (BSC not shown) that control base stations of adjacent cells. The VLR-msc 104 is shown as being connected to a server 106. The server 106 performs the function of trying to match and couple profiles belonging to the same groups of IDs (i.e., located in the same base station area), thereby providing matches between mobile terminals that are in the same geographical area (see column 5, lines 8 to 11).

#### Hamalainen

Hamalainen discloses a method for indicating enciphering of data transmission between a mobile communication network and a mobile station in the mobile communication network.

Hamalainen does not disclose or suggest any means or method for matching mobile terminals in a private network, nor does Hamalainen even suggest enabling communication of a data unit between two mobile terminals through respective maintained communication links of the two mobile terminals with an apparatus, only if the two mobile stations are determined to be

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members of the private network.

The Examiner has pointed to column 6, lines 24 to 60 of Hamalainen in support of the assertion that "Hamalainen from the same or similar field of endeavour teach that it is known to provide at least one of the mobile stations comprising a personal computer with a wireless modem". Applicant agrees that Figure 6 of Hamalainen shows a personal computer connected to a mobile station by a PC connection bus 15, whereby the mobile stations is "used as a so-called wireless modem in connection with a data processor, such as a personal computer, wherein a data transmission connection is formed from the data processor PC via the mobile communication network e.g. to another data processor."

*Ascertaining The Differences Between The Prior Art And The Claims At Issue*

Sigler

The Examiner has alleged that Sigler teaches all of the features of the independent claims. However, with reference to independent claim 1, for example, as established above, Sigler fails to teach an apparatus for controlling **data unit** communications between a plurality of mobile stations, each of the mobile stations having a **respective maintained communication link with the apparatus that, once established, is maintained throughout a session**, the apparatus comprising: means for grouping at least two of the plurality of mobile stations as members of a private network group; means for determining if a first mobile station sending a **data unit** and a second mobile station scheduled to receive **the data unit** are both members of the private network group; and means for enabling communication of the data unit from the first mobile station to the second mobile station **through the respective maintained communication links of the first mobile station and the second mobile station only if they are both members of the private network group**.

In contrast, Sigler merely teaches group voice communications over a **common group voice channel/frequency** that requires the set up/establishment of group voice calls over a **broadcast group control channel** that identifies the common group voice channel/frequency to the members of the group. Accordingly, Sigler fails to teach all of the claimed features of the

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present invention. As noted below, none of the other cited references overcome this foregoing deficiency of Sigler.

In rejecting claims 9 and 54, the Examiner has acknowledged that Sigler fails to teach "means for sending a bandwidth request signal prior to enabling communication of the data unit if the second mobile station has insufficient bandwidth capabilities to receive the data unit on the respective maintained communication link of the second mobile station", as recited in claim 9, and similarly recited in claim 54. Applicant agrees that Sigler fails to teach this feature.

In rejecting claim 30, the Examiner has acknowledged that Sigler fails to teach "a mobile switching center in communication with the apparatus and the radio network controller, the mobile switching center comprising means for controlling the switching operations of the wireless network within a predefined cell cluster". Applicant agrees that Sigler fails to teach this feature.

In rejecting claim 31, the Examiner acknowledges that Sigler fails to teach the feature wherein "at least one of the mobile stations comprises a personal computer with a wireless modem". Applicant agrees that Sigler fails to teach this feature.

#### Hall

Claims 9 and 54 depend on independent claims 1 and 45, respectively. Applicant submits that Hall fails to overcome the above deficiencies in Sigler with respect to the novel and inventive features of the independent claims and, accordingly, claims 9 and 54 are novel and inventive over Sigler and Hall for at least the reasons stated above with respect to the independent claims from which they depend.

Furthermore, as noted above, it is clear that the "busy" status described by Hall refers to the status of the user of the second wireless device, not the operational status of the second wireless device. Moreover, the "bandwidth request signal" recited in claims 9 and 54 is not a request to determine the bandwidth of a second mobile terminal, it is a request to increase the bandwidth of the respective maintained communication link of the second mobile terminal, if the current bandwidth is insufficient to receive the data unit. (See, for example, page 17, line 28 to page 18,

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line 12). Accordingly, Applicant submits that even if the teachings of Hall that describe the monitoring of the status of a second mobile terminal from a first mobile terminal (including an indication of whether or not the user of the second mobile terminal is "busy") could be construed as a request to determine the bandwidth of the second mobile terminal, which Applicant submits it cannot, this teaching has **absolutely no relevance** to the bandwidth request signal of the claimed invention. Therefore, even if, hypothetically, one were to combine the teachings of Hall with those of Sigler, one would not arrive at the inventions recited in the subject claims.

#### Fraccaroli

Claim 30 depends on independent claim 28. Applicant submits that Fraccaroli fails to overcome the above deficiencies in Sigler with respect to the novel and inventive features of the independent claims and, accordingly, claim 30 is novel and inventive over Sigler and Fraccaroli for at least the reasons stated above with respect to the independent claims.

Furthermore, while Figure 1 of Fraccaroli may depict a cellular network that includes a mobile switching center, Fraccaroli fails to provide a teaching as to how one should configure a network to include the apparatus of the claimed invention. While the description of Fraccaroli refers to a base station controller, one is not shown in Figure 1, and Fraccaroli does not explicitly show or refer to "a mobile switching center in communication with the apparatus and the radio network controller".

#### Hamalainen

Claim 31 depends on independent claim 28. Applicant submits that Hamalainen fails to overcome the above deficiencies in Sigler with respect to the novel and inventive features of the independent claims, and accordingly, claim 31 is novel and inventive over Sigler and Hamalainen for at least the reasons stated above with respect to the independent claims.

In view of the foregoing, Applicant submits that the Examiner has not properly determined the differences between the claimed invention and the prior art. Therefore, the findings of fact as articulated by the Examiner are improper. Moreover, even if, hypothetically, one were to combine the references cited by the Examiner, one would not arrive at the subject

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claims.

*Explanation To Support An Obviousness Rejection*

As noted above, for the Patent Office to properly combine references in support of an obviousness rejection, the Patent Office must identify a reason why a person of ordinary skill in the art would have sought to combine the respective teachings of the applied references. The examination guidelines indicate that "The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that " '[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.' " Applicant appreciates that the Examiner has articulated a reason why the claimed invention would have been obvious. However, for reasons detailed below, the Examiner's articulated reason cannot be regarded as being valid.

As noted earlier, the Examiner concedes that Sigler does not teach means for sending a bandwidth request signal prior to enabling communication of the data unit if the second mobile station has insufficient bandwidth capabilities to receive the data unit on the respective maintained communication link of the second mobile station. As noted above, Sigler teaches **push-to-talk (PTT)** group voice communications over a common group voice channel/frequency

The Examiner has relied on Hall as having allegedly disclosed "checking status of group members to determine whether or not the group member is busy", and has construed this alleged disclosure as having enabled one skilled in the art to "connect the means for sending a bandwidth request signal as taught by Hall et al. in the communication system and method of Sigler et al." The Examiner has stated that the motivation for doing so "being that it provides more reliability for the system since sufficient bandwidth capabilities is guaranteed before enabling communication to the second station". However, as noted above, the "status" monitoring described by Hall is not equivalent to the bandwidth request signal recited in claims 9 and 54. Furthermore, modifying the teachings of Sigler to include a bandwidth request signal would require some delay, as claims 9 and 54 recite that the bandwidth request signal is sent before

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enabling transfer of the data unit. Sigler explicitly teaches away from the inclusion of any mechanism that would create a delay. See, for example, column 9, lines 38 to 43, which states that a PTT user "expects to be able to talk as soon as the handset/microphone is taken off-hook".

As such, even if Hall taught the feature that the Examiner alleges, which Applicant submits it does not, Applicant submits that one skilled in the art would see no reason to modify the communication system and control method described in Sigler to include such a feature.

Moreover, Sigler teaches a first-come-first-serve push-to-talk system in which only one of the group members can be transmitting a voice message to the group at a time, and the allocated common group voice channel is of a fixed bandwidth. Accordingly, one skilled in the art would find absolutely no motivation to modify the teachings of Sigler to include a bandwidth request signal as recited in claims 9 and 54.

Accordingly, the Examiner's reason to combine Sigler and Hall fails to satisfy the requirements set out in the United States Supreme Court's ruling in *KSR Int'l v. Teleflex, Inc.*

The Examiner has alleged that Sigler in combination with Fraccaroli, and Sigler in combination with Hamalainen render claims 30 and 31 obvious, respectively. However, as it has been demonstrated that Sigler fails to teach all of the novel and inventive features of the independent claims from which claims 30 and 31 depend, and Fraccaroli and Hamalainen fail to overcome these deficiencies, the Examiner's stated reason for combining Sigler with Fraccaroli or Hamalainen fail to satisfy the requirements set out in the Supreme Court's ruling in *KSR Int'l v. Teleflex, Inc.*

In view of the foregoing, Applicant respectfully submits that claims 1 to 55 are both novel and inventive over the cited references, both alone and in combination.

Applicant respectfully requests that the Examiner reconsider and withdraw the rejections of claims 9, 30, 31 and 54 under 35 U.S.C. § 103(a).

#### **Allowable Subject Matter**

Applicant appreciates the Examiner's acknowledgement in paragraph 8 of the Office

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Action that the subject matter of claims 4, 6-8, 10, 16-21, 25, 29, 32-35, 39, 43, 46, 49, 51-53 and 55 is considered to be novel and inventive, and those claims would be allowable if re-written in independent form including all of the limitations of their base claims.

In view of the foregoing, early favorable consideration of this application is earnestly solicited. In the event that that the Examiner has concerns regarding the present response, the Examiner is encouraged to contact the undersigned at the telephone listed below.

Respectfully submitted,

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Date: May 9, 2008

ESS:JFS:gcs